CLAIMS:

1. (Currently Amended) A method for reducing insulin and/or glucose plasma level(s) in a subject afflicted with ~~treating the disease~~ diabetes, ~~mellitus~~ comprising administrating to ~~a~~ the subject ~~in need thereof~~ an effective amount of crude Dunaliella powder, thereby reducing the subject's plasma insulin and/or glucose plasma level(s) ~~treating the disease~~.

2. (Currently Amended) A method for increasing HDL cholesterol levels in the plasma of a subject having low HLD cholesterol levels ~~in need thereof~~, comprising administrating to the subject an effective amount of crude Dunaliella powder, thereby increasing the HDL cholesterol level in a statistically significant manner.

3. (Original) The method according to claim 1 wherein said crude Dunaliella powder is administered together with one or more activators of nuclear receptors.

4. (Original) The method according to Claim 3 wherein the activators of nuclear receptors are peroxisome proliferator-activated receptor α or γ (PPARα or PPARγ) agonists.

5. (Original) The method according to Claim 4 wherein the PPARα or PPARγ agonists are selected from fibrates and thiazolidinediones.

6. (Original) The method according to Claim 5 wherein the fibrates are selected from clofibrate, fenofibrate, bezafibrate, ciprofibrate, beclofibrate and gemfibrozil.

7. (Previously Presented) The method according to Claim 5 wherein the thiazolidinediones are selected from troglitazone, BRL 49653, pioglitazone, ciglitazone, WAY-120,744, englitazone, AD 5075, darglitazone and rosiglitazone.

8. (Original) The method according to Claim 1 wherein said crude Dunaliella powder is administered orally.

9. (Previously Presented) The method according to Claim 1 wherein said Dunaliella is Dunaliella bardawil.

10. (Original) The method according to Claim 1, wherein said powder is encapsulated.

11. (Original) The method according to claim 2 wherein said crude Dunaliella powder is administered together with one or more activators of nuclear receptors.

12. (Original) The method according to Claim 11 wherein the activators of nuclear receptors are peroxisome proliferator-activated receptor α or γ (PPARα or PPARγ) agonists.

13. (Original) The method according to Claim 12 wherein the PPARα or PPARγ agonists are selected from fibrates and thiazolidinediones.

14. (Original) The method according to Claim 13 wherein the fibrates are selected from clofibrate, fenofibrate, bezafibrate, ciprofibrate, beclofibrate and gemfibrozil.

15. (Previously Presented) The method according to Claim 13 wherein the thiazolidinediones are selected from troglitazone, BRL 49653, pioglitazone, ciglitazone, WAY-120,744, englitazone, AD 5075, darglitazone and rosiglitazone.

16. (Original) The method according to Claim 2 wherein said crude Dunaliella powder is administered orally.

17. (Previously Presented) The method according to Claim 2 wherein said Dunaliella is Dunaliella bardawil.

18. (Original) The method according to Claim 2, wherein said powder is encapsulated.

19. (Currently Amended) A method for treating ~~the disease~~ atherosclerosis, comprising administrating to a subject in need thereof an effective amount of crude Dunaliella powder together with one or more activators of nuclear receptors, thereby treating the disease.

20. (Previously Presented) The method according to Claim 19 wherein the activators of nuclear receptors are peroxisome proliferator-activated receptor α or γ (PPARα or PPARγ) agonists.

21. (Previously Presented) The method according to Claim 20 wherein the PPARα or PPARγ agonists are selected from fibrates and thiazolidinediones.

22. (Previously Presented) The method according to Claim 21 wherein the fibrates are selected from clofibrate, fenofibrate, bezafibrate, ciprofibrate, beclofibrate and gemfibrozil.

23. (Previously Presented) The method according to Claim 21 wherein the thiazolidinediones are selected from troglitazone, BRL 49653, pioglitazone, ciglitazone, WAY-120,744, englitazone, AD 5075, darglitazone and rosiglitazone.

24. (Previously Presented) The method according to Claim 19 wherein said crude Dunaliella powder is administered orally.

25. (Previously Presented) The method according to Claim 19 wherein said Dunaliella is Dunaliella bardawil.

26. (Previously Presented) The method according to Claim 19 wherein said powder is encapsulated.

27. (New) A method for reducing the size of an atherosclerotic plaque or lesion at the aortic sinus of a subject afflicted with atherosclerosis, comprising administrating to the subject an

effective amount of crude Dunaliella powder together with one or more activators of nuclear receptors, thereby reducing the size of the aortic sinus plaque or lesion.